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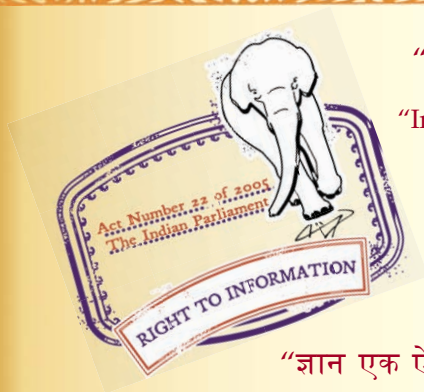
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Indian Standard
**SPECIFICATION FOR
BABY WEIGHING MACHINES**

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SPECIFICATION FOR BABY WEIGHING MACHINES

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SPECIFICATION FOR BABY WEIGHING MACHINES

0. FOREWORD

0.1 This Indian Standard was adopted by the Indian Standards Institution on 17 September 1963, after the draft finalized by the Commercial Weights and Measures Sectional Committee had been approved by the Engineering Division Council.

0.2 The capacity for the baby weighing machine has been laid down as 10, 15 or 20 kg.

0.3 This specification is one of a series of Indian Standards for commercial metric weights and measures being prepared by the Indian Standards Institution.

0.4 Wherever a reference to any Indian Standard appears in this specification, it shall be taken as a reference to the latest version of the standard.

0.5 For the purpose of deciding whether a particular requirement of this standard is complied with, the final value, observed or calculated, expressing the result of a test or analysis, shall be rounded off in accordance with IS : 2-1960 Rules for Rounding Off Numerical Values (*Revised*). The number of significant places retained in the rounded off value should be the same as that of the specified value in this standard.

0.6 This standard is intended chiefly to cover the technical provisions relating to baby weighing machines; and it does not include all the necessary provisions of a contract.

1. SCOPE

1.1 This standard covers the requirements for baby weighing machines.

2. DEFINITION

2.1 For the purpose of this standard, a baby weighing machine shall mean a weighing machine with a pan to receive the baby to be weighed. A typical baby weighing machine is illustrated in Fig. 1.



FIG. 1

3. CAPACITY

3.1 The machines shall have a maximum capacity of 10, 15 or 20 kg, as specified by the purchaser.

4. GENERAL REQUIREMENTS

4.1 The machines shall comply with the general requirements specified in IS : 1432-1959 General Requirements for Weighing Instruments. In addition, the machines shall comply with the requirements given in 4.2 to 4.8.

4.2 The pan for the baby shall be either an oval or a rectangular basin, or an open-ended trough of the following approximate dimensions:

Minimum Dimensions

	mm
Length	550
Width	300
Depth:	
Basin type	100
Trough type	125

4.2.1 The pan shall be smooth, non-porous, readily cleanable and of adequate strength and should preferably be made of a low heat-conducting material. Wicker-work shall not be used in the construction of the pan.

4.3 Counter type baby weighing machines shall be provided with hard rubber or fibre stops to prevent noise or 'jar' in the out-of-balance position.

4.4 All machines shall be so constructed as to enable a direct net weighing to be obtained.

4.5 Baby weighing machines of the spring-balance, self-indicating or semi-self-indicating types shall be fitted with efficient oscillation control devices.

4.6 In spring-balance, self-indicating or semi-self-indicating type of baby weighing machines, the dial shall be graduated into equal parts and the minimum distance between consecutive graduations shall be not less than 2 mm. Provision of a screw for adjustment of the pointer to correct zero error shall also be provided.

4.6.1 The extremity of the pointer shall not exceed 1.0 mm in width and shall be not more than 3.0 mm away from the graduations on the dial. The weight corresponding to the interval between consecutive graduation marks shall not exceed 50 g.

4.7 The base of the machine shall be wide and heavy to avoid tilting and the position of the index, when there is no load, shall be clearly indicated by a zero mark.

4.8 When the weighing machine is provided with an adjustable pointer, the range of adjustment shall not exceed one percent of the capacity of the machine.

5. TESTS

5.1 In spring-balance, self-indicating or semi-self-indicating type of machines, the permissible error shall not exceed the weight corresponding to half the interval between consecutive graduations.

5.2 When a load equal to half the capacity of the machine is placed at the farthest point from the centre of the pan and the other half at any position, the machine shall be correct to the prescribed limit of error.

5.3 Each graduation of the machine shall be tested.

5.4 For counter type machines, the sensitivity and the greatest error shall be as under:

<i>Capacity</i>	<i>Sensitiveness when Fully Loaded</i>	<i>Greatest Error in Excess or Deficiency when Fully Loaded</i>
kg	g	g
10	7.0	10.5
15	8.0	12.0
20	9.0	13.5

5.5 The machine shall be correct whether the test is made by progressively increasing or decreasing loads provided that in either case the machine is allowed to vibrate before the reading is taken.

5.6 The spring-balance type machines shall be loaded to its full capacity and the load maintained for a period of 24 hours after which it shall be removed. Four hours after removal of the load, the balance shall not show any permanent set. Further, when tested as stated in 5.5, it shall record correct readings.

6. SEALING

6.1 Each machine shall be provided with a plug or stud of soft metal on a conspicuous part of the beam or the body for receiving a seal. Such a plug or stud shall be made irremovable by undercutting it or by some other suitable method.

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